



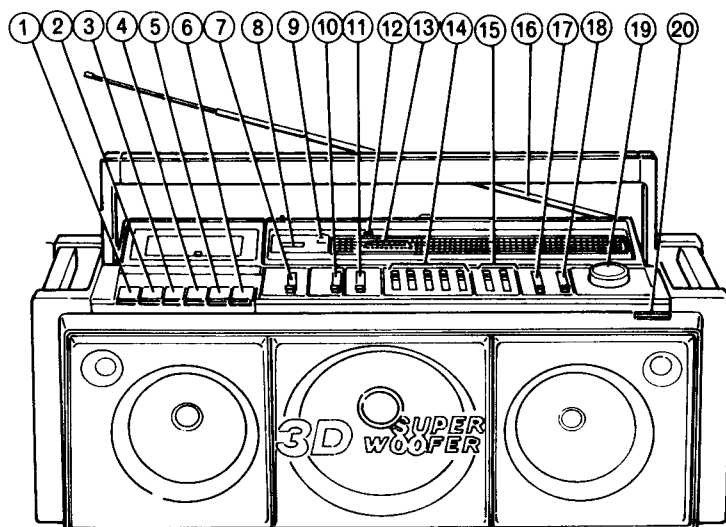
HITACHI

SERVICE MANUAL

TK**No. 2151E****TRK-7620E/E(BS)****TN-33ZHC-558 chassis**

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KEY TO ILLUSTRATIONS

- | | |
|--------------------------------------|----------------------------------|
| ① RECORD BUTTON | ⑪ FM MODE/RIF SELECTOR |
| ② PLAYBACK BUTTON | ⑫ FM STEREO INDICATOR |
| ③ REWIND BUTTON | ⑬ LED LEVEL INDICATORS |
| ④ FAST FORWARD BUTTON | ⑭ GRAPHIC EQUALIZER CONTROLS |
| ⑤ STOP/EJECT BUTTON | ⑮ VOLUME CONTROLS |
| ⑥ PAUSE BUTTON | ⑯ TELESCOPIC ANTENNA (AERIAL) |
| ⑦ SPEAKER SELECTOR/INNER MIC. SWITCH | ⑰ FUNCTION SELECTOR |
| ⑧ TAPE COUNTER | ⑱ AM BAND SELECTOR |
| ⑨ COUNTER RESET BUTTON | ⑲ TUNING CONTROL |
| ⑩ TAPE SELECTOR | ⑳ BUILT-IN MICROPHONE (MONAURAL) |

SAFETY PRECAUTION

The following precautions should be observed when servicing.

1. Since many parts in the unit have special safety-related characteristics, always use genuine Hitachi's replacement parts. Especially critical parts in the power circuit block should not be replaced with other makes. Critical parts are marked with \triangle in the schematic diagram, and circuit board diagram.
2. Before returning a repaired unit to the customer, the service technician must thoroughly test the unit to ascertain that it is completely safe to operate without danger of electrical shock.

SPECIFICATIONS AND PARTS ARE SUBJECT TO CHANGE FOR IMPROVEMENT

HIGH PERFORMANCE PORTABLE CREATIVE SOUND SYSTEM

July 1984**TOKAI WORKS**

SPECIFICATIONS

■ GENERAL SPECIFICATIONS

Power Supply	
AC	220V, 50 Hz[E] 240V, 50 Hz[E(BS)]
Batteries	DC 12V (8 x UM-1, "D" size, IEC R20 or equivalent)
Car Battery	DC 12V via car adaptor "HITACHI D-74" (This car adaptor may not be available in some countries.)
Power Consumption	See destination chart
Dimensions (W x H x D)	544 x 197 x 195 mm
Weight	5.3 kg (including battery)
Semiconductors	ICs: 6 Transistors: 12 [E] 13 [E(BS)] Diodes: 18 LEDs: 6 Varicarp: 1

■ AUDIO AMPLIFIER SECTION

Audio amplifier-speaker system	Multi-channel 3 independent main amplifiers and 3-way 5-Multi speaker system (3D system)
Middle and High frequency bands	
Main amplifiers	Stereo main amplifiers
Drive speakers	Pair of 120 mm bass units Pair of 20 mm ceramic tweeter units
Low frequency band	
Main amplifier	BTL monaural main amplifier
Drive speaker	160 mm super-bass unit
Acoustic crossover frequency	between 2 channel amplifiers/speaker system 150 Hz
Power Output	14 watts (3W + 3W + 8W) (RMS, DC, THD 10%) 22 watts (M.P.O.)
Harmonic Distortion	0.8% (at 1/2 rated output) (Stereo amplifiers and BTL monaural amplifier)
Graphic Equalizer	5 band controls
Control Effect	60 Hz ± 6 dB 250 Hz ± 6 dB 1 kHz ± 6 dB 3.5 kHz ± 6 dB 10 kHz ± 6 dB

■ TUNER SECTION

Circuit System	FM/SW/MW/LW 4-band superheterodyne
Tuning Range :	FM : 87.5 to 108 MHz SW : 6 to 18 MHz MW : 530 to 1605 kHz

Sensitivity :	LW : 150 to 285 kHz FM : $4\mu\text{V}$ (S/N = 30 dB) $2\mu\text{V}$ (Maximum) SW : $50\mu\text{V}$ (S/N = 20 dB) $30\mu\text{V}$ (Maximum) MW : $300\mu\text{V/m}$ (S/N = 20 dB) $100\mu\text{V/m}$ (Maximum) LW : $700\mu\text{V/m}$ (S/N = 20 dB) $250\mu\text{V/m}$ (Maximum)
Intermediate Frequency :	FM : 10.7 MHz SW/MW/LW : 465 kHz
Antennas (Aerials) :	FM/SW : Telescopic antenna (aerial) MW/LW : Built-in ferrite-core antenna (aerial)

■ CASSETTE DECK SECTION

Tape	Compact Cassette (C30, C60, C90)
Tracks	4-track (2-channel stereo)
Tape Speed	4.75 cm/sec
Recording System	AC bias 55 kHz
Erase System	Quasi AC
Playback Frequency Response	Metal tape: 60 — 12,000 Hz (HITACHI ME90) High bias tape (Chromium tape): 60 — 11,000 Hz (HITACHI SX90, HITACHI EX90) Normal tape: 60 — 10,000 Hz (HITACHI DL90)
Crosstalk	
Between Tracks	65 dB
Between Channels	40 dB
Erase Ratio	60 dB
Distortion	3%
Fast Forward or Rewinding Time	105 sec.
Head	Hard Permalloy Rec/Play head
Motor	Electrical Servo DC motor

■ INPUT AND OUTPUT

Microphone (L/R)	
Sensitivity	0.6 mV (3.5 mm diameter jack)
Impedance	1.2 kohms
Line in (L/R)	
Sensitivity	500 mV
Impedance	680 kohms
Line out (L/R)	
Sensitivity	700 mV
Load Impedance	1 kohm
Headphone (3.5 mm diameter jack)	8 ohms — 2 kohms
Mixing Microphone	
Sensitivity	1 mV (3.5 mm diameter jack)
Impedance	10 kohms

DISASSEMBLY

1. Cassette lid

Push the cassette lid arm in the direction of the arrow using a flat-tip screwdriver and pull the cassette lid towards the front to remove it.

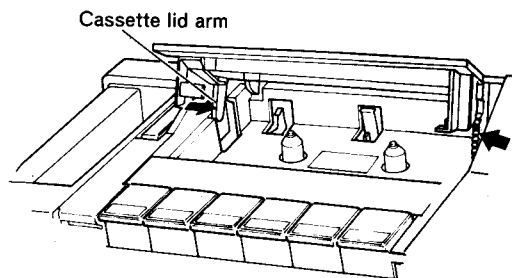


Fig. 1

2. Top panel

- 1) Remove 5 fixing screws (A) shown in figure 2, 3, 4.
- 2) Press the EJECT button to open the cassette lid and lift the top panel holding the telescopic antenna side to remove it.

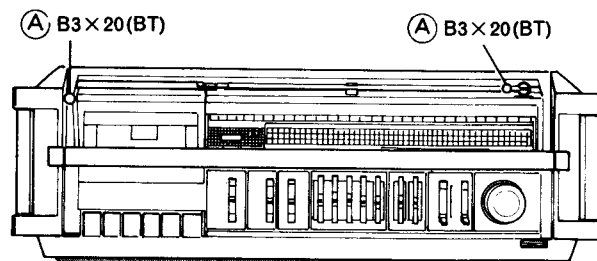


Fig. 2

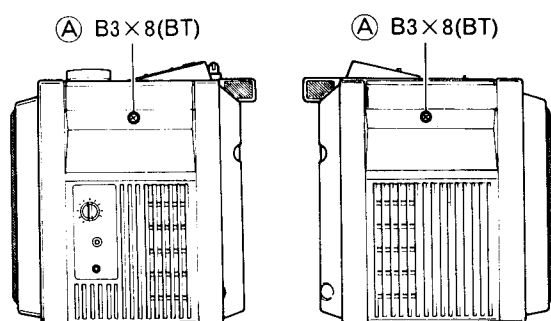


Fig. 3

3. Rear case

Remove 8 fixing screws (B).

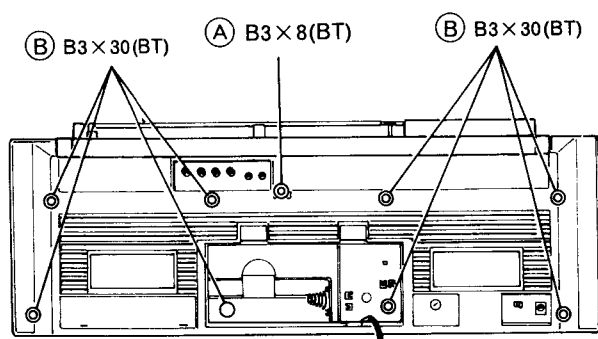


Fig. 4

4. Cassette chassis

Remove 4 fixing screws (C).

5. Main PC Board

Remove 5 fixing screws (D).

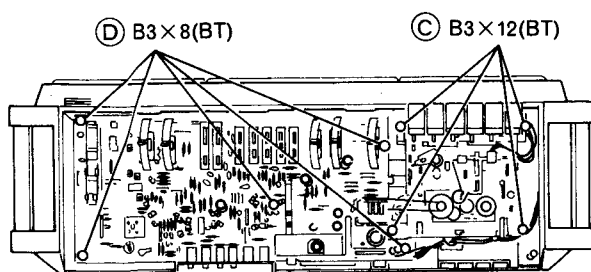


Fig. 5

6. Power PC Board

Remove 2 fixing screws (E) and push the stopper (F).

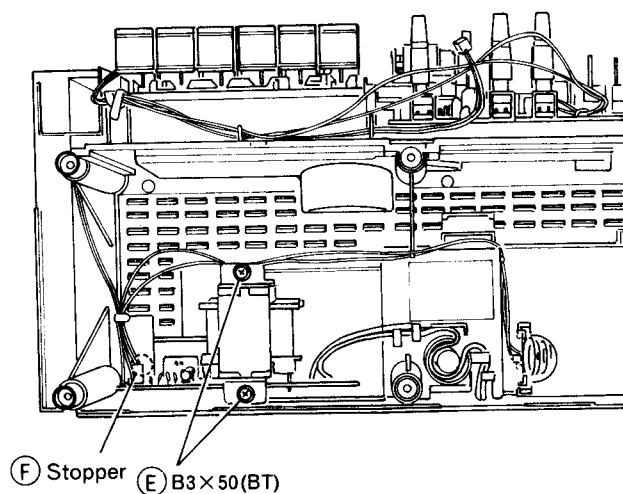


Fig. 6

7. Mix. mic/Headphone PC Board

Remove Mixing mic volume knob and 2 fixing screws (G).

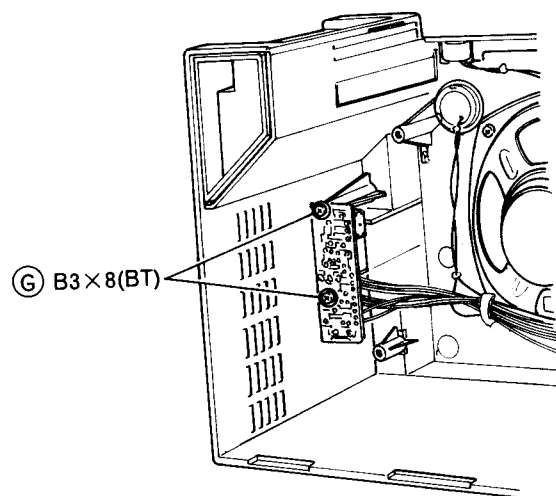


Fig. 7

8. Indicator PC Board

Push the 2 stoppers.

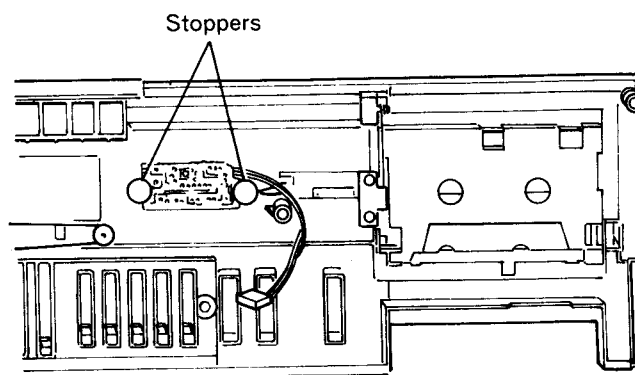


Fig. 8

ADJUSTMENT
1. Tuner Section

* For West Germany

Step	Adjustment Item	Measuring Instrument and Connection			Genescope or Signal Generator Frequency	Dial Pointer Position	Adjust	Reading
		Measuring Instrument	Input Terminal	Output Terminal				
1	(1) FM IF	Turn T202 fully counterclockwise.						
	(2) S-Curve	• Genescope (10.7 MHz)	TP102	TP201	10.7 MHz	Highest	T101	Note 1
							T202	Note 2
2	(1) FM OSC. (Covering)	• FM signal generator (400Hz, 30% mod.) • Oscilloscope • VTVM	TP101 (thru FM dummy antenna) (Note 3)	TP201	87 MHz (*87.5MHz)	Lowest	L102	Max.
	109 MHz (*108 MHz)				Highest	CT102		
	(3)				Repeat steps (1) and (2)			
3	(1) FM ANT. (Tracking)	• Oscilloscope • VTVM	TP101 (thru FM dummy antenna) (Note 3)	TP201	90 MHz	90 MHz	L101	Max.
	106 MHz				106 MHz	CT101		
	(3)				Repeat steps (1) and (2)			
4	(1) FM MPX (Multiplex)	• Frequency counter	Connect a 10 μ F 25V electrolytic capacitor between the No.1 pin of IC301 and ground.	TP301	—	—	RT301	38 kHz \pm 50 Hz (Note 4)
	(2) AM IF	• Genescope (465 kHz)	Ferrite-core antenna (Note 5)	TP201	465 kHz	Highest	T201 T203	Note 6
6	(1) LW OSC. (Covering)	• AM signal generator (400 Hz, 30% mod.) • VTVM	Ferrite-core antenna (Note 5)	TP201	145 kHz	Lowest	L156	Max.
	290kHz				Highest	CT156		
	(3)				Repeat steps (1) and (2)			
7	(1) LW ANT (Tracking)	• VTVM	Ferrite-core antenna (Note 5)	TP201	160kHz	160 kHz	L153	Max.
	270kHz				270 kHz	CT153		
	(3)				Repeat steps (1) and (2)			
8	(1) MW OSC. (Covering)	• AM signal generator (400 Hz, 30% mod.) • VTVM	Ferrite-core antenna (Note 5)	TP201	515 kHz	Lowest	L155	Max.
	1650 kHz				Highest	CT155		
	(3)				Repeat steps (1) and (2)			
9	(1) MW ANT. (Tracking)	• VTVM	Ferrite-core antenna (Note 5)	TP201	600 kHz	600 kHz	L152	Max.
	1400 kHz				1400 kHz	CT152		
	(3)				Repeat steps (1) and (2)			
10	(1) SW OSC. (Covering)	• AM signal generator (400 Hz, 30% mod.) • VTVM	TP101 (thru SW dummy antenna) (Note 7)	TP201	5.8MHz	Lowest	L154	Max.
	18.5MHz				Highest	CT154		
	(3)				Repeat steps (1) and (2)			
11	(1) SW ANT. (Tracking)	• VTVM	TP101 (thru SW dummy antenna) (Note 7)	TP201	6.5 MHz	6.5MHz	L151	Max.
	16 MHz				16MHz	CT151		
	(3)				Repeat steps (1) and (2)			

INSPECTION OF MECHANISM

Note :

1. Feed in a weak signal to TP102 from the genescopes. Adjust T101 for maximum gain and the waveform indicated in Figure 9. If the center of the waveform cannot be lined up on the marker, adjust the right/left balance.

Adjust the genescopes output so that there is a little noise riding on the leading edge.

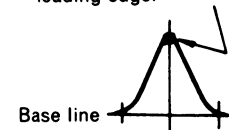


Fig. 9

2. Use the T202 core to form the S-curve shown in Figure 10. Adjust the symmetry of A and B about point C for linearity.

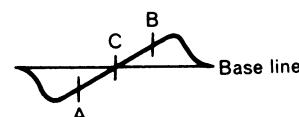
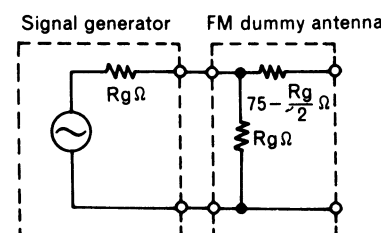


Fig. 10

3. FM dummy antenna shows Figure 11.



Rg : SG's output impedance

Fig. 11

2. Tape Recorder Section

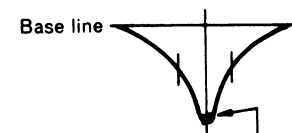
Perform the following adjustments in the sequence stated after cleaning the head, pressure roller, and capstan with a head cleaning stick moistened in alcohol.

Step	Adjustment Item	Measuring Instrument and Connection			Check Tape	Mode	Adjusted Position	Adjusted Value	Remarks
		Measuring Instrument	Input Terminal	Output Terminal					
1	Tape speed	• Frequency counter	—	LINE OUT socket	Tape speed adjustment tape(3kHz)	Playback	Semivariable resistor in the motor PC board	3kHz±20Hz	Note 1
2	Head azimuth	• VTVM	—	LINE OUT socket	Head azimuth adjustment tape(10kHz)	Playback	Azimuth adjusting screw	Output max.	Note 2

Note :

1. Adjust within 30 sec. after heat-running for more than 20 minutes.
2. When the maximum values of both channels are different, adjust to the maximum value of the L channel. In this case, the difference between the maximum values of both channels should be within 2 dB.

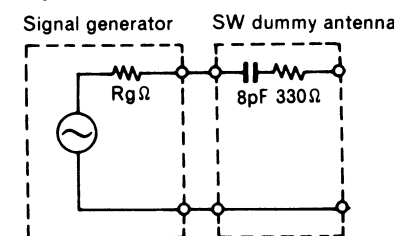
4. Connect the frequency counter to TP301 and connect a 220kΩ resistor parallel with the frequency counter.
5. Connect AM signal generator to loop antenna, bring near to ferrite antenna.
6. Feed in a weak signal from the genescopes. Adjust T201, T203 for maximum gain and the waveform of Figure 12.



Adjust the genescopes output so that there is a little noise riding on the leading edge.

Fig. 12

7. SW dummy antenna shows Figure 13.



Rg : SG's output impedance

Fig. 13

Item	Check Item		Reference Value	Remarks
1	Pressure of pressure roller		350—550g	Measure in playback mode
2	Torque	Take-up	35—65g·cm	
		Fast forward	60—140g·cm	Measure in fast forward mode
		Rewind	60—140g·cm	Measure in rewind mode
3	Back tension	Supply side	2.0—6.0g·cm	Measure in playback mode (without counter belt)
		Take-up side	2.0—6.0g·cm	Measure in playback mode (with counter belt)
4	Button operation force	Playback button	1.7kg	—
		Fast forward button	1.0kg	
		Rewind button	1.0kg	
		Stop button	1.5kg	
		Record button	2.3kg	
		Pause button	1.5kg	
5	Flywheel thrust gap		0.1—0.3mm	—

LUBRICATION

Lubricate one or two drops of oil to rotating point or lubricate grease to sliding point.

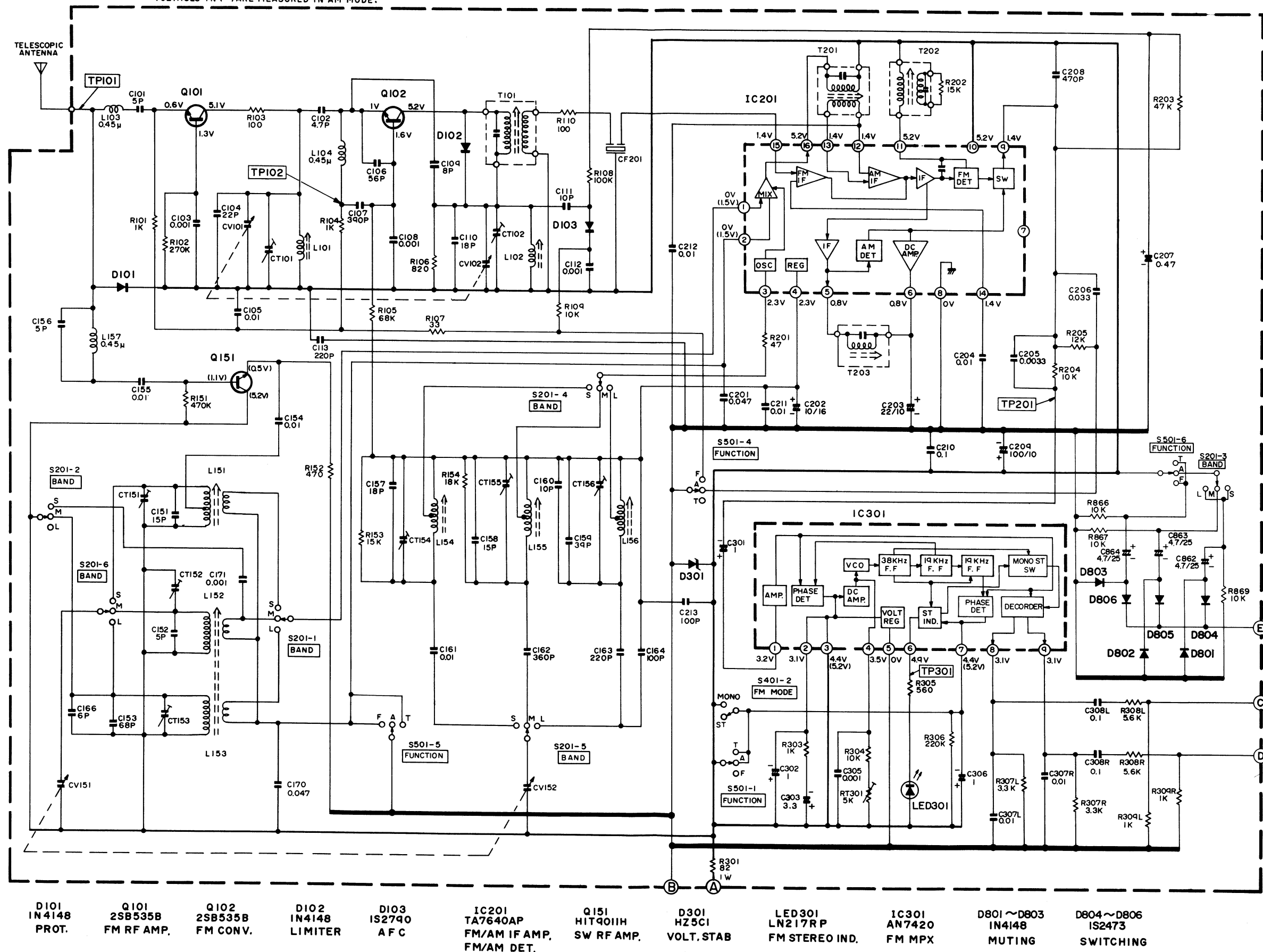
Lubricate the respective parts listed once every 1000 hours or once a year under normal conditions of use.

Avoid oiling them excessively, or rotation may become irregular because of oil splashes.

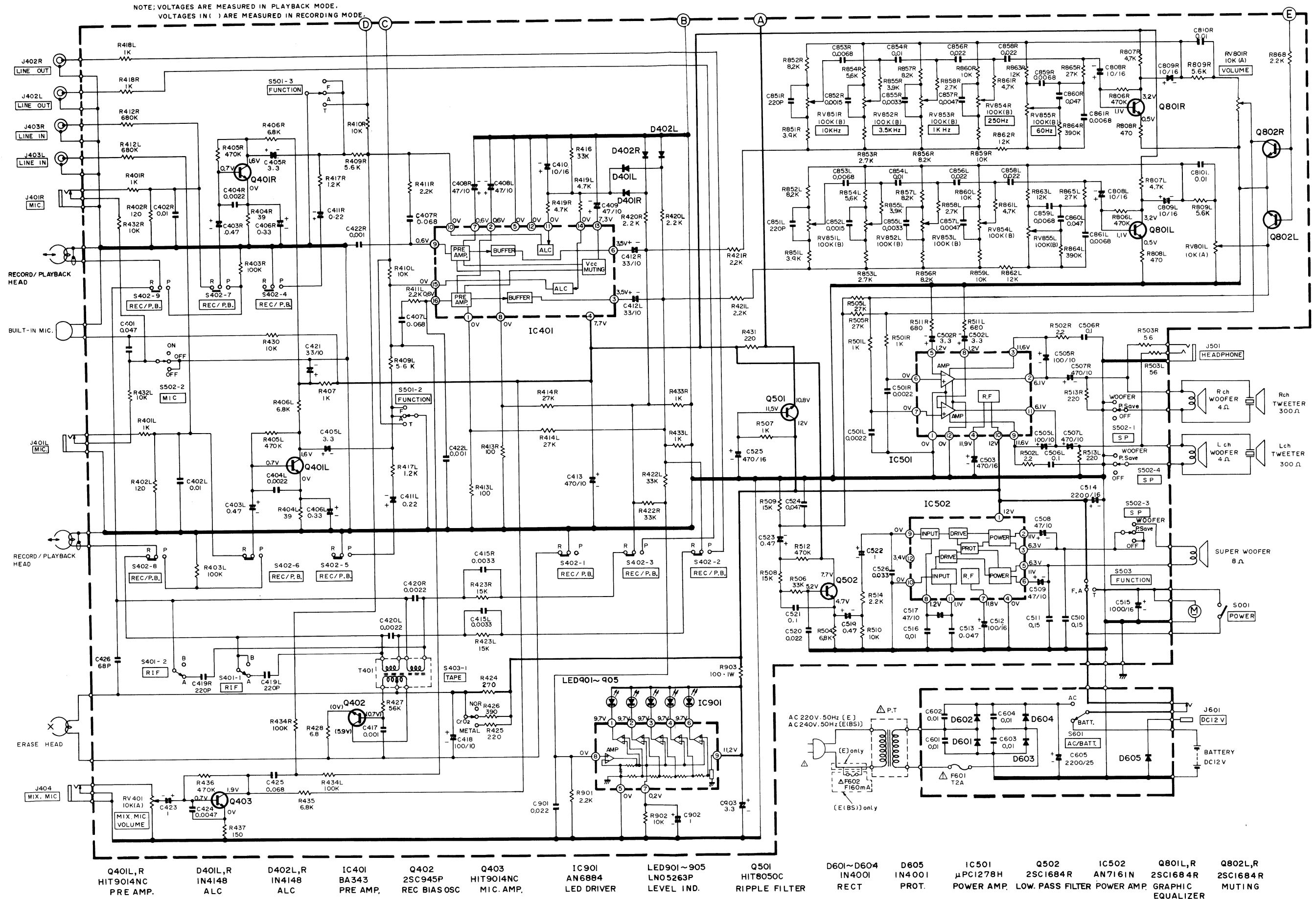
Lubrication		Oil or Grease
Rotary section	Metal and metal	Pan motor oil (10W-40)
	Mold and metal	Sonic slider oil (#1600)
Sliding section	Metal and metal	Hitasol (MO-138)
	Mold and mold Mold and metal	White grease (FL-LUBE-A)
Spring resonance prevention		Floil (GB-TS-1)

SCHEMATIC DIAGRAM (Tuner Section)

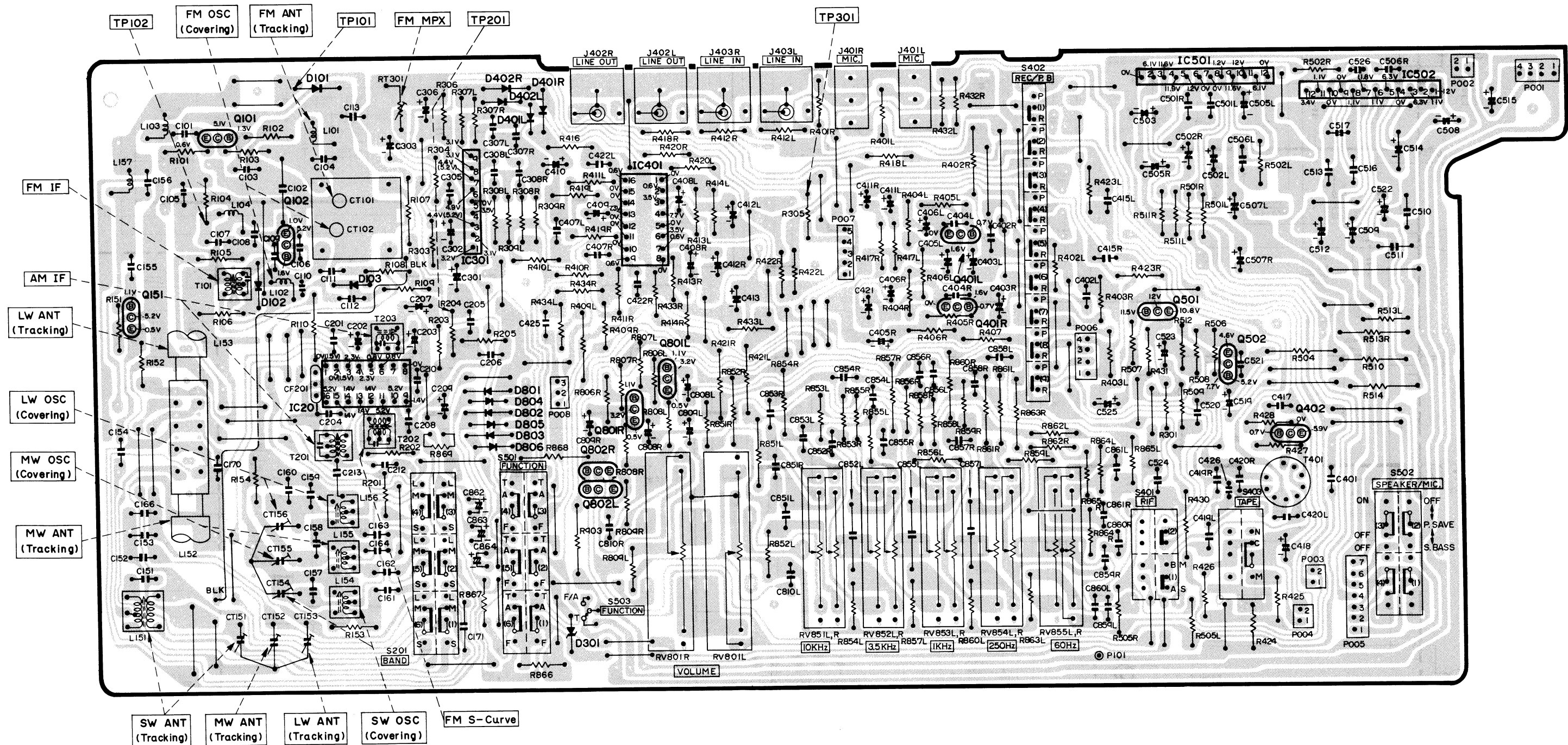
NOTE: VOLTAGES ARE MEASURED IN FM MODE.
VOLTAGES IN () ARE MEASURED IN AM MODE.



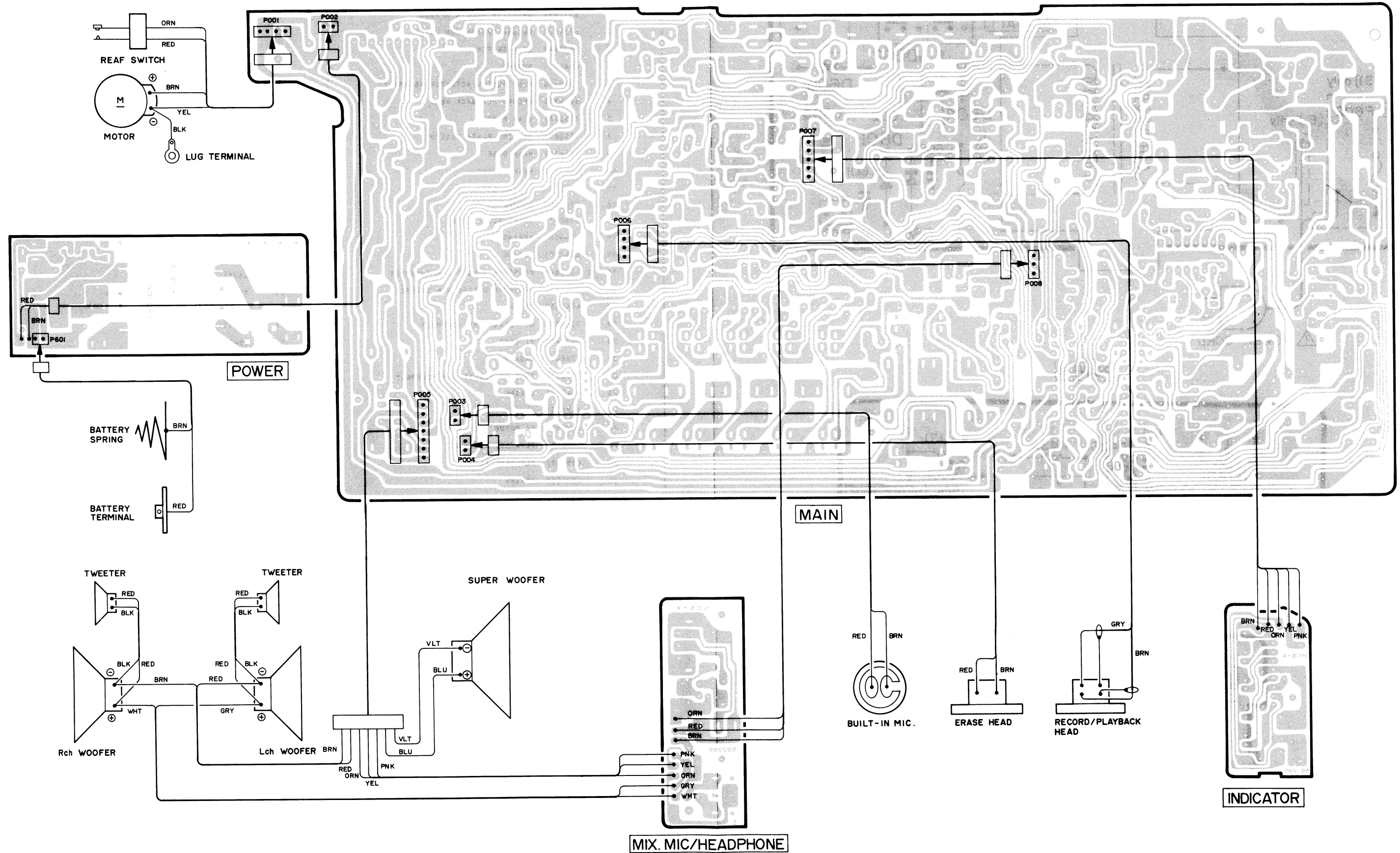
SCHEMATIC DIAGRAM (Tape/Audio Section)



CIRCUIT BOARD DIAGRAM

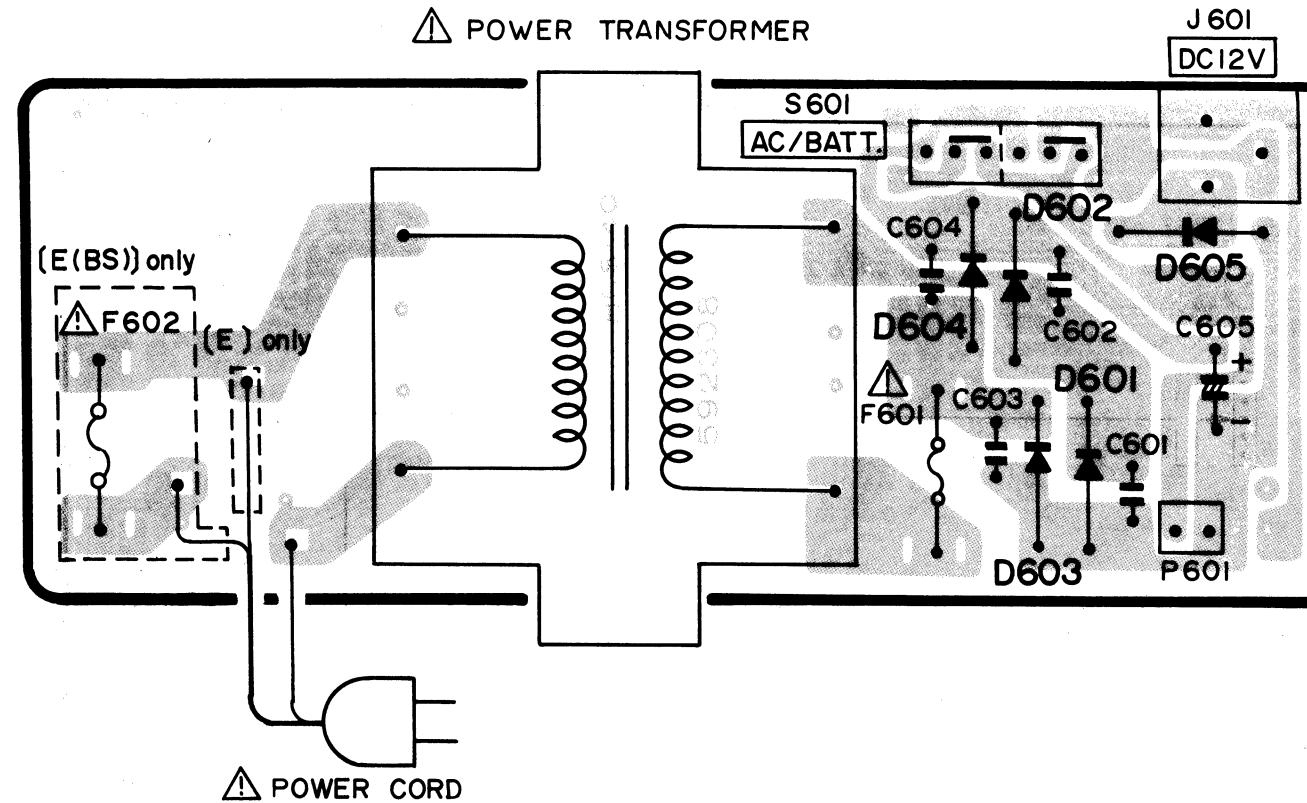


WIRING DIAGRAM

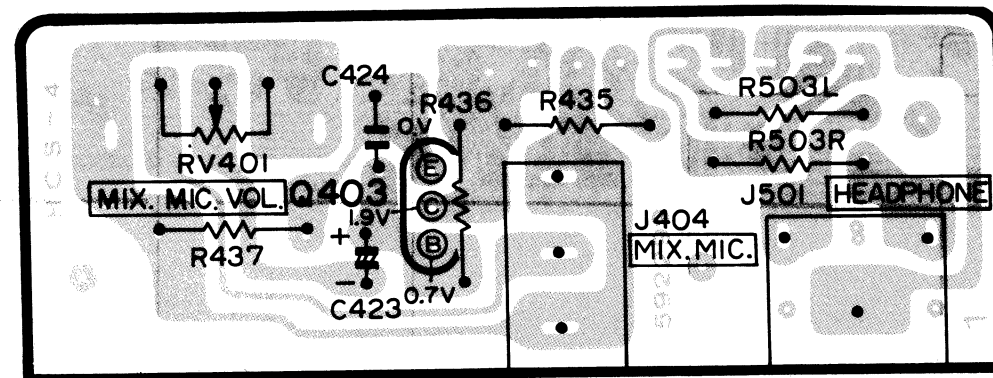


CIRCUIT BOARD DIAGRAM

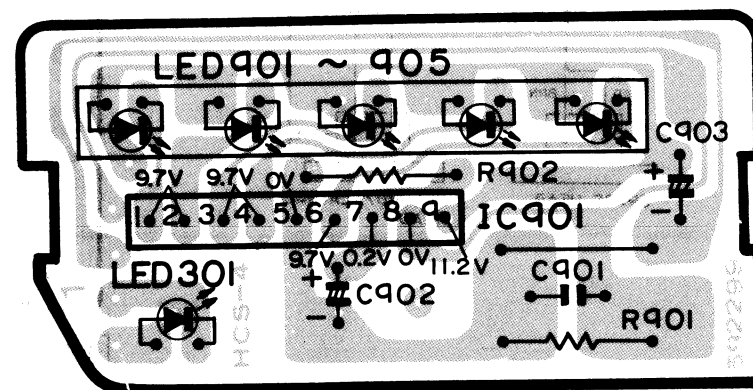
REPLACEMENT PARTS LIST



POWER



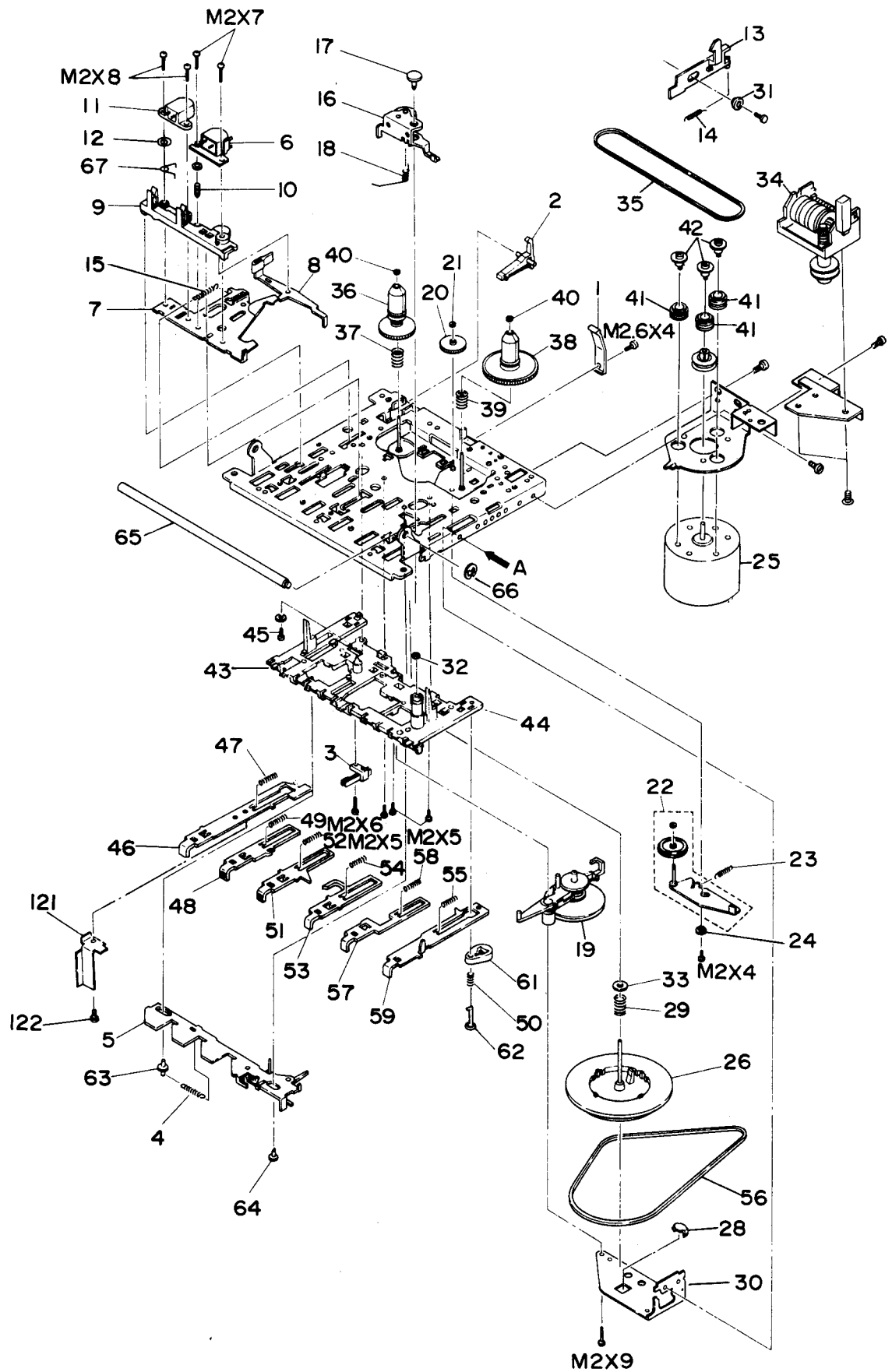
MIX. MIC/HEADPHONE



INDICATOR

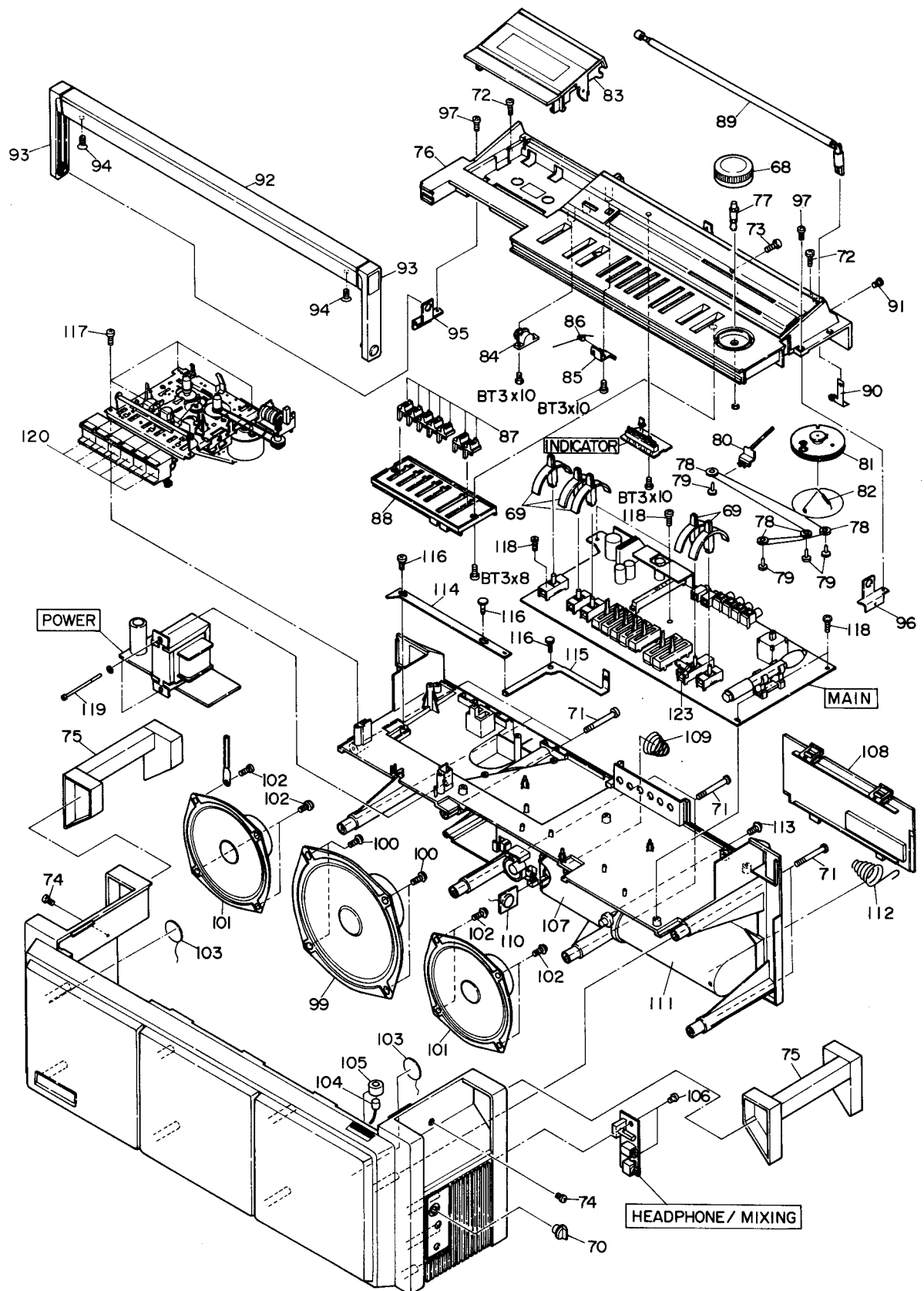
SYMBOL-NO	P-NO	DESCRIPTION	SYMBOL-NO	P-NO	DESCRIPTION
FOR CHASSIS ASSEMBLY (TN-33ZHC-558)					
1	6535092	CASSETTE HOLDER SPRING	34	5559721	COUNTER
2	6774321	RECORD PREVENTION LEVER	35	6356221	COUNTER BELT
3	5603641	LEAF SWITCH	36	6774361	SUPPLY REEL ASSEMBLY
4	6544541	SPRING	37	6521061	BACK TENSION SPRING
5	7350594	PUSH BUTTON ACTUATOR ASSEMBLY	38	6774502	TAKE-UP REEL ASSEMBLY
6	5449391	RECORD PLAYBACK HEAD	39	6521061	BACK TENSION SPRING
7	7350481	HEAD PLATE	40	7788443	WASHER
8	7350851	SENSING PLATE ASSEMBLY	41	6590791	MOTOR RUBBER
9	6774311	HEAD BASE	42	7547561	SPECIAL SCREW
10	6521091	HEAD SPRING	43	6778081	BUTTON BASE (R)
11	5445371	ERASE HEAD	44	6778071	BUTTON BASE (L)
12	7786002	WASHER	45	7783381	SPECIAL SCREW
13	6780171	EJECT SLIDE LEVER	46	7351191	RECORD BUTTON LEVER
14	6544581	SPRING	47	6548471	SPRING
15	6542991	SPRING	48	7364491	PLAY BUTTON LEVER
16	7350841	PRESSURE ROLLER ARM ASSEMBLY	49	6548462	SPRING
17	6774331	PRESSURE ROLLER ARM STOPPER	50	6521112	SPRING
18	6548452	SPRING	51	7351151	REWIND BUTTON LEVER
19	7364581	RF PULLEY ARM ASSEMBLY	52	6521041	SPRING
20	6432411	FF GEAR	53	7351181	FF BUTTON LEVER
21	7786441	WASHER	54	6548461	SPRING
22	7350831	TAKE-UP ROLLER ARM ASSEMBLY	55	6548462	SPRING
23	6542981	SPRING	56	6356231	BELT
24	7571751	COLLER	57	7351141	STOP BUTTON LEVER
25	5577918	DC MOTOR ASSEMBLY	58	6548471	SPRING
26	6774512	FLYWHEEL ASSEMBLY	59	7351642	PAUSE LEVER ASSEMBLY
28	6757372	FLYWHEEL PLATE	61	6757261	PAUSE LEVER
29	6521051	SPRING	62	6774282	PAUSE STOPPER
30	7350442	FLYWHEEL HOLDER	63	6774341	ACTUATOR SHAFT (B)
31	7570681	EJECT COLLAR	64	6774281	ACTUATOR SHAFT
32	7787431	NYLON WASHER	65	7551771	BUTTON SHAFT
33	7788442	WASHER	66	7774646	E RING-3.2MMD
			67	6549541	RC SPRING

EXPLODED VIEW (TN-33ZHC-558 chassis)



Note : Components marked without numbers in this drawing are not specified as replacement parts.

EXPLODED VIEW (Cabinet)

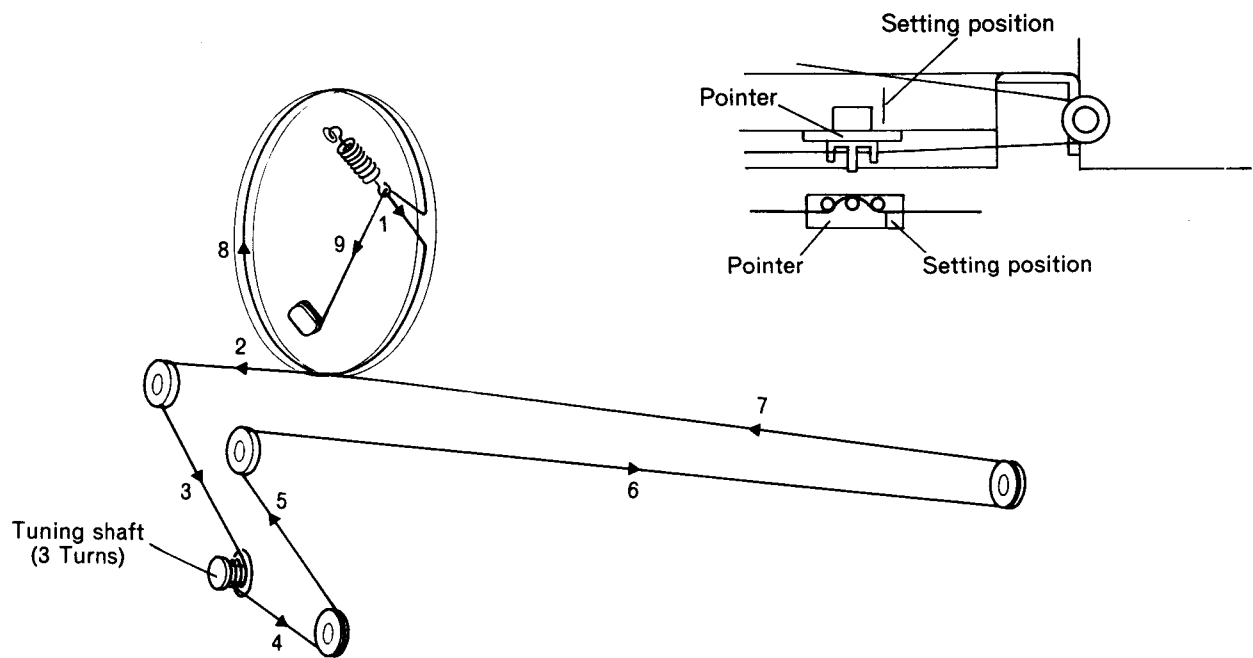


Note : Components marked without numbers in this drawing are not specified as replacement parts.

SYMBOL-NO	P-NO	DESCRIPTION	SYMBOL-NO	P-NO	DESCRIPTION
MISCELLANEOUS					
68	6284421	TUNING KNOB	116	7540374	SPECIAL SCREW
69	6276471	KNOB (AM BAND, FUNCTION, RIF/FM MODE, TAPE, SP./MIC)	117	8699412	BIND TAPPING SCREW-3MMDX12MM (BLACK)
70	6285863	KNOB (MIXING)	118	8699408	BT BIND HEAD SCREW-3MMDX8MM (BLACK)
71	7781147	BT BIND HEAD SCREW-3MMDX30MM	119	7781148	BT SCREW-3MMDX50MM
72	7781146	BT SCREW-3MMDX20MM	120	6060911	CASSETTE BUTTON
73	8699408	BT BIND HEAD SCREW-3MMDX8MM (BLACK)	121	7362642	RECORD LEVER (A)
74	8744405	BIND SCREW-3X5MMD	122	0741304	BIND SCREW-2.6MMDX4MM
75	6335281	SIDE HANDLE	123	7780904	PAN HEAD SCREW-1.7MMDX8MM
76	6010542	TOP PANEL ASSEMBLY	CAPACITORS		
77	7582131	TUNING SHAFT	CT151-156	0263565	VARIABLE CAPACITOR
78	6344051	ROLLER	C102	0208125	CERAMIC (RESISTOR SHAPE) 4.7PF+-5%
79	7564281	ROLLER PIN	C110	0246446	CERAMIC, DISCAL CAPACITOR 18PF+-10% NP=0
80	6393181	POINTER	C852L	0209021	CERAMIC DISC (RESISTOR SHAPE) 1500PF+-10%
81	6423491	PULLEY	C855L	0209023	CERAMIC DISC (RESISTOR SHAPE) 3300PF +-30%
82	6316231	SPRING M	C857L	0209024	CERAMIC DISC (RESISTOR SHAPE) 4700PF +-30%
83	6095471	CASSETTE LID ASSEMBLY	PVC	5052812	VARIABLE CAPACITOR
84	6779551	DAMPER ASSEMBLY	RESISTORS		
85	7362631	LID SPRING HOLDER	RT301	5007682	SEMI VARIABLE 5KOHM
86	6549782	LID SPRING	RV401	5001241	VARIABLE RESISTOR 10KOHM(A)
87	6276481	SLIDE KNOB (VOLUME, G/E)	RV801LR	5020173	VARIABLE RESISTOR 10KOHM(A)
88	6779351	SLIDE KNOB HOLDER	RV851LR	5027261	VARIABLE RESISTOR 100KOHM(B)
89	5752721	TELESCOPIC ANTENNA	RV852LR	5027261	VARIABLE RESISTOR 100KOHM(B)
90	7362601	TELESCOPIC ANTENNA BRACKET	RV853LR	5027261	VARIABLE RESISTOR 100KOHM(B)
91	8744410	BINDING SCREW-3MMDX10MM	RV854LR	5027261	VARIABLE RESISTOR 100KOHM(B)
92	6334905	HANDLE	RV855LR	5027261	VARIABLE RESISTOR 100KOHM(B)
93	6779341	HANDLE ARM	R301	0111033	METAL OXIDE RESISTOR 820HM+-5%, 1W
94	7781582	FLAT SCREW-3MMDX10MM (BLACK)	R903	0111035	OXIDE METAL FILM 1000HM+-5%
95	7362621	HANDLE BRACKET (L)	SEMI-CONDUCTORS		
96	7362622	HANDLE BRACKET (R)	D101-102	5331851	DIODE 1N4148
97	8744405	BIND SCREW-3X5MMD	D103	5330661	DIODE SILICON 1S2790
98	6010562	FRONT CASE ASSEMBLY	D301	5331015	DIODE HZ-5C1
99	5407721	SPEAKER-16CM	D401LR	5331851	DIODE 1N4148
100	7781133	BT SCREW-3MMD	D402LR	5331851	DIODE 1N4148
101	5406775	SPEAKER-12CM	D601-605	5331992	DIODE 1N4001
102	7781133	BT SCREW-3MMD	D801-803	5331851	DIODE 1N4148
103	5419073	SPEAKER-TWEETER	D804-806	5330572	DIODE SILICON 1S2473HC
104	5421501	BUILT-IN MICROPHONE	IC201	5368011	IC TA7640AP
105	6570221	MICROPHONE HOLDER	IC301	5369941	IC AN7420
106	8699408	BT BIND HEAD SCREW-3MMDX8MM (BLACK)	IC401	5355561	IC BA343
107	6010583	REAR CASE ASSEMBLY (FOR E)	IC501	5355901	IC UPC1278H
107	6010584	REAR CASE ASSEMBLY (FOR E (BS))	IC502	5364271	IC AN7161N
108	6175151	BATTERY LID ASSEMBLY	IC901	5355471	IC AN6884
109	0681129	SPRING A	LED301	5380593	LED LN417RP
110	7450346	BATTERY TERMINAL	LED901-905	5380951	LED LH05263P
111	6779331	BATTERY HOLDER	Q101-102	0573510	TRANSISTOR 2SC535B
112	6520871	BATTERY SPRING			
113	8699408	BT BIND HEAD SCREW-3MMDX8MM (BLACK)			
114	7362651	RECORD LEVER (B)			
115	7362661	RECORD LEVER (C)			

SYMBOL-NO	P-NO	DESCRIPTION	SYMBOL-NO	P-NO	DESCRIPTION
SEMI-CONDUCTORS					
Q151	5322571	TRANSISTOR HIT9011H	L154	5124031	SW OSCILLATOR COIL
Q401LR	5322591	TRANSISTOR HIT9014N-C	L155	5121001	MW OSCILLATOR COIL
Q402	5320813	TRANSISTOR 2SC945P	L156	5121002	LW OSCILLATOR COIL
Q403	5322591	TRANSISTOR HIT9014N-C	L157	5127084	CHOKE COIL
Q501	5322522	TRANSISTOR HIT8050C	MISCELLANEOUS		
Q502	5322791	TRANSISTOR 2SC1684R	△	5746159	POWER CORD(FOR E)
Q801LR	5322791	TRANSISTOR 2SC1684R	△	5746342	POWER CORD(FOR E(BS))
Q802LR	5322791	TRANSISTOR 2SC1684R	CF201	5160211	CERAMIC FILTER CF107A
TRANSFORMERS			△F601	5721376	FUSE 2A
△PT	5213451	POWER TRANSFORMER(FOR E)	△F602	5721375	FUSE 160MA(FOR E(BS))
△PT	5213452	POWER TRANSFORMER (FOR E(BS))	J401LR	5673511	JACK-3.5MMD(MIC)
T101	5148162	FM IF TRANSFORMER	J402LR	5676481	PIN JACK (LINE OUT)
T201	5132222	AM IF TRANSFORMER	J403LR	5676481	PIN JACK (LINE IN)
T202	5148164	FM IF TRANSFORMER	J404	5673511	JACK-3.5MMD(MIX. MIC)
T203	5132221	AM IF TRANSFORMER	J501	5673552	HEADPHONE JACK
T401	5260481	OSCILLATOR COIL	J601	5678072	DC JACK
COILS			S201	5604606	LEVER SWITCH (AM BAND)
L101	5127083	FM RF COIL	S401	5604603	LEVER SWITCH (FM MODE/RIF)
L102	5127087	CHOKE COIL	S402	5622471	SLIDE SWITCH (REC/P.B.)
L103-104	5127084	CHOKE COIL	S403	5604602	LEVER SWITCH(TAPE)
L151	5124022	SW ANTENNA COIL	S501	5604606	LEVER SWITCH(FUNCTION)
L152-153	5110593	FERRITE ANTENNA	S502	5604608	LEVER SWITCH(SPEAKER/INNER MIC)
			S503	5601271	MICRO SWITCH(RADIO/TAPE)
			S601	5622341	SLIDE SWITCH(AC/BATT.)

DIAL CORD STRINGING



Stringing Method

1. Turn the pulley fully clockwise.
2. String the dial cord in the direction of the arrow(Nos. 1-9).
3. Set the dial pointer to setting position.

NOTE FOR SCHEMATIC DIAGRAM

1. Voltage measured at base of chassis with minimum volume control and no signal.
2. Nomenclature of Resistors and Capacitors.

Circuit No.	
Value	No indicated Ω (Ohm) M : 1000 k Ω
Tolerance	No indicated $\pm 5\%$ K : $\pm 10\%$ M : $\pm 20\%$
Wattage	No indicated $\frac{1}{4}W$
Sort	No indicated Carbon film RC : Composition RW : Wire wound RS : Oxide metal film RN : Fixed metal film

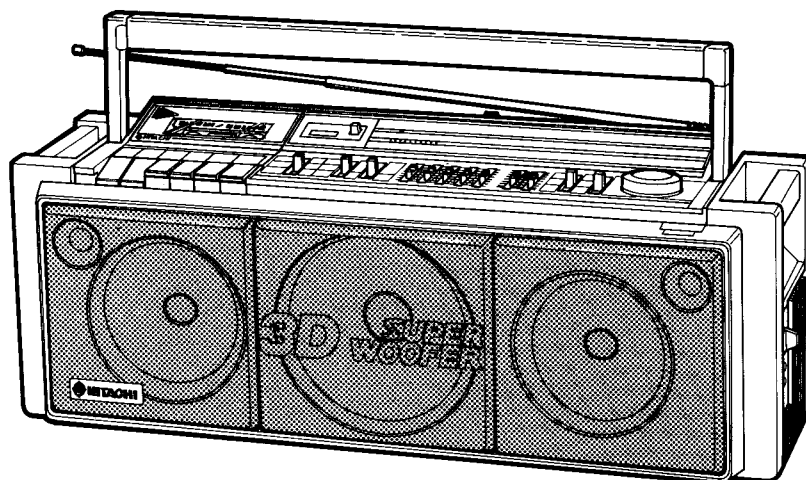
Circuit No.											
Value	No indicated μF P : PF										
Tolerance	No indicated $\pm 10\%$ J : $\pm 5\%$ M : $\pm 20\%$ Z : $+80\%$ - 20% D : $\pm 0.5pF$ C : $\pm 0.25pF$										
Sort	<table border="1"> <tr><td></td><td>Ceramic</td></tr> <tr><td></td><td>Electrolytic</td></tr> <tr><td></td><td>Mylar</td></tr> <tr><td></td><td>Polyester</td></tr> <tr><td></td><td>Styrol</td></tr> </table>		Ceramic		Electrolytic		Mylar		Polyester		Styrol
	Ceramic										
	Electrolytic										
	Mylar										
	Polyester										
	Styrol										
Voltage	No indicated 50WV										

3. Be sure to make your orders of resistors and capacitors with value, voltage, tolerance and sort.
4. When replacing capacitors marked with *, use specified ones stated on parts list since required temperature characteristics.

Type of head					
P	Pan head screw		BT	Binding head tapping screw	
F	Flat countersunk head screw		BL	Bolt	
B	Binding head screw		W	Washer	
T	Round head tapping screw		E	"E" ring	
Length (L mm)					
Diameter (D mm)					

When ordering hardware excluding stated on these lists, be sure to make your orders with type and size.

HITACHI **• SERVICE MANUAL**

TY
No. 522 E
**TRK-3D7MK II
E, E(BS)**


This unit is the same as the TRK-7620E/E (BS) which is released previously, except the appearance parts. For servicing, refer to the TRK-7620E/E (BS) Service Manual (TY No. 2151E).

REPLACEMENT PARTS LIST

The numbers in the SYMBOL NO. column correspond to those in the exploded view in the TRK-7620E/E (BS) Service Manual.

SYMBOL NO.	NEW PARTS NO.	DESCRIPTION	ORIGINAL PARTS NO.
76	4041822	Top panel assembly (83, including cassette lid assembly)	6010542
83	4030614	Cassette lid assembly	6095471
98	4041842	Front case assembly	6010562
107	4041863	Rear case assembly [for E] (108, including battery lid assembly)	6010583
107	4041864	Rear case assembly [for E (BS)] (108, including battery lid assembly)	6010584

SPECIFICATIONS AND PARTS ARE SUBJECT TO CHANGE FOR IMPROVEMENT.

FM/SW/MW/LW RADIO CASSETTE TAPE RECORDER

July 1986

TOYOKAWA WORKS

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